

REMARKS

Claims 1-19 are pending in this application. By this Amendment, claim 19 is amended to overcome the objection thereto. Claims 1 and 18 are amended to clarify that a number average molecular weight is from about 9 to about 13.4 kpse.

The courtesies extended to Applicants' representative by Examiner RoDee at the interview held on February 9, 2006, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

I. Objections to Claims

Claim 19 was objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim 18. By this Amendment, claim 19 is amended to overcome the objection made by the Patent Office. Specifically, claim 19 now recites "the black toner and the magenta toner have a weight average molecular weight of about 30 to about 130 kpse, a number average molecular weight of about 10 to about 13.4 kpse, and a MWD of about 2.2 to about 10." Applicants submit that claim 19 limits claim 18.

No new matter is added by this Amendment. Support for the amendment can be found in, for example, paragraph [0032] of the specification, describing that all toners of the toner set, which includes black and magenta, may have a maximum number average molecular weight (Mn) of about 13.4 kpse, and a minimum MWD of about 2.2.

Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

II. Rejections Under 35 U.S.C. §112, second paragraph

Claims 1-19 were rejected 35 U.S.C. §112, second paragraph, as allegedly being indefinite. This rejection is respectfully traversed.

Specifically, the Patent Office alleges that claims 1-19 are indefinite because the Patent Office was not able to find any description in the claims or the specification of the definition of the cohesion value or how the cohesion value is obtained. In addition, the Patent Office alleges that claims 1-19 are indefinite because the claimed relationship of weight average molecular weight and number average molecular weight (MWD) cannot be properly obtained from the specification.

Applicants submit that the specification clearly discloses the method of obtaining cohesion values. As explained in paragraph [0034] of the specification, and as discussed during the interview, cohesivity can be measured by placing a known mass of toner on top of a set of three screens and vibrating the screens and toner for a fixed time (115 seconds) at a fixed vibration amplitude (1 millimeter), and then a toner cohesion value can be obtained based on the amount of toner remaining on each of the screens at the end of the vibration time. In addition, as explained in paragraph [0034] of the specification, a cohesion value of 100% corresponds to all of the toner remaining on the top screen at the end of the vibration step, i.e., no toner passes through all three screens, and a cohesion value of zero corresponds to all of the toner passing through all three screens. It is clear from this description that the percentage is based on the amount of total amount of toner retained on any of the screens.

As discussed during the interview, the above-described method of obtaining cohesion values is also described in the prior art, including, for example U.S. Patent No. 6,673,501. As requested by the Examiner during the interview, U.S. Patent No. 6,673,501 is being submitted to the Patent Office in the form of an Information Disclosure Statement (IDS). The relevance of such information is described below. U.S. Patent No. 6,673,501 describes the well known test method for determining percent cohesion values in the toner art. As explained at column 48, lines 21-44 of this patent, the particle flow values (cohesivity) may be calculated with the

use of an equation expressed as % cohesion = 50·A + 30·B + 10·C, where A is the mass of toner remaining on the top screen, B is the mass of toner remaining on the middle screen, and C is the mass of toner remaining on the bottom screen. Such is a well known equation in the art. Further, practitioners in the art recognize the use of this equation with variations of the screen sizes and processing conditions, such variations being relative to the toner being evaluated (and the present specification describing the screen sizes and processing conditions used in the present application).

Moreover, paragraph [0034] discloses a cohesion measurement device used in the determination of cohesion. Again, the ordinarily skilled practitioner is familiar with such device and the use of such device for numerically determining the recited cohesion value. The use of this device to measure cohesion is also described in the prior art, including, for example U.S. Patent No. 6,673,501, column 48, line 22.

Furthermore, with respect to the mesh sizes of the sieves, the length of time of vibration, and the amplitude or intensity of vibration, these values are clearly given in the specification for use in deriving the cohesion measurement. These conditions were clearly described as those to use in determining the cohesion values as described and as claimed. In view of this description and the known use of the device, one of ordinary skill in the art would appreciate and would be familiar with the method of measuring cohesion and numerically determining the recited cohesion value.

Thus, the "cohesion" is definite as it particularly points out and distinctly defines the metes and bounds of the claimed subject matter and is clear.

Furthermore, the claimed relationship of weight average molecular weight and number average molecular weight (MWD) is adequately described in the specification. As explained in paragraph [0032] of the specification, MWD is a ratio of the Mw to Mn of the

toner particles. As such, MWD can be obtained by dividing Mw by Mn. Claim 1 recites that MWD is from about 2.2 to about 10 and Mw is from about 28 kpse to about 130 kpse. As explained in paragraph [0032] of the specification, Mn is from about 9 to about 13.4 kpse. Thus, MWD is about 9.7 based on a calculation of 130 kpse (a value of Mw) divided by 13.4 kpse (a value of Mn). MWD is about 3.1 based on a calculation of 28 kpse (a value of Mw) divided by 9 kpse (a value of Mn). Clearly, 3.1 and 9.7 are well within the range of 2.2 to about 10. Thus, MWD is definite as it particularly points out and distinctly defines the metes and bounds of the claimed subject matter.

Applicants submit that claims 1-19 are definite. Reconsideration and withdrawal of the rejection are respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-19 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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